Implementing the CCMP Throughout the Bays Watershed

CHAPTER VI. IMPLEMENTING THE CCMP THROUGHOUT THE BAYS WATERSHED

Introduction

The Massachusetts Bays area is an estuarine system in transition. Increased development along its shores and in upland watershed areas, coupled with decades of discharging municipal and industrial wastes into its waters, has placed the Bays system in jeopardy. Fortunately, it is not too late to reverse the trend of declining water quality and to restore the Bays. Indeed, there are positive signs that his has already begun to occur in places, most notably Boston Harbor.

The action plans presented in Chapter V articulate a number of recommended steps that must be taken now and in the future to restore and protect the Massachusetts Bays ecosystem. The action plans also identify the organizations that are responsible for taking those steps. These organizations include regulatory and planning agencies at the federal, state, regional, and local levels; legislative bodies; business community representatives; and citizen groups.

For many of the recommendations, these organizations share overlapping responsibility, and close coordination will be required to ensure that the proper actions are taken without duplication of effort or wasting of limited resources. For other recommendations, a single organization can achieve the desired result. For still others, the implementing responsibility may belong to one organization, but another organization may be called upon to provide technical or financial assistance.

In working together to implement the CCMP, it will be important for all participants to view the Bays ecosystem as a *regional* resource to be shared and protected by many Massachusetts cities and towns (in all, 49 coastal communities and 112 inland communities). Achieving the Massachusetts Bays Program's principal goal - *the preservation and management of a healthy ecosystem of living resources, useable by the public* - will depend to a great extent on *regionally*-based implementation of the CCMP actions, while recognizing Massachusetts' strong home rule tradition and significant potential for environmental protection at the local level.

The purpose of this chapter is to articulate the MBP's strategy for implementing the CCMP, both regionally and locally. This strategy is based on a series of current and proposed initiatives, including several institutional and legislative actions. In addition to the current efforts, other specific actions have also contributed to the MBP strategy for regional implementation of the CCMP. The first was the Peer Review of the MBP (1992), which recommended analysis and development of a MBP position on regional governance; the second was the MBP-sponsored conference entitled, ***Protecting New England's Coastal Resources: Models for Intergovernmental Resource Management*** *(January 1994)*. The implementation strategy identified in this chapter was developed using results from the conference, direction from the MBP Management Committee, input from MBP staff and selected conference attendees, and MBP participation in the ongoing efforts of the Massachusetts Legislature's Subcommittee on Regionalism - all through meetings, discussion groups, and comment on written materials.

In addition, in the fall of 1995, the Watershed Initiative Steering Committee, consisting of members of the environmental community (including the MBP), business, state and federal government, and municipalities, unveiled an expanded approach to environmental assessment, planning, and decision-making which could be implemented in all of the state's 27 river and coastal basins. The Watershed Approach builds on the lessons learned by the MBP, with all watershed stakeholders participating in prevention and remediation of environmental pollution in their river basin through a Watershed Community Council (***The Massachusetts Watershed Approach and Its Implementation,*** EOEA, October, 1995.)

Participation in the state Watershed Initiative will improve management of the Bays' resources. By expanding watershed-based planning and implementation beyond the 49 coastal communities and into the entire Massachusetts and Cape Cod Bays watershed, pollution entering the Bays from inland sources will be reduced. Access to increased state technical assistance and funding will enhance local capacity to implement the CCMP. And, for each of the 11 basins listed in the following table, the CCMP will provide a blueprint for local action specific to the estuarine and coastal sub-basins.

EOEA Basin Schedule for Massachusetts Bays River Basins

Basin	Assessment	Planning	Implementation
Nashua	1993	1994	1995
Merrimack	1994	1995	1996
Boston Harbor (Mystic, Neponset, Weymouth & Weir)	1994	1995	1996
Cape Cod	1994	1995	1996
Parker	1994	1995	1996
Ipswich	1995	1996	1997
Shawsheen	1995	1996	1997
Concord	1996	1997	1998
South Coastal	1996	1997	1998
Charles	1997	1998	1999
North Coastal	1997	1998	1999

Models for a Regional Approach to CCMP Implementation: Current Efforts

This section describes: 1) the underlying principles of the MBP's current efforts to support regional implementation of the Comprehensive Conservation and Management Plan; 2) the implementation of these efforts in three different ways; and 3) the common characteristics that these efforts share.

The MBP goals and objectives were and are a primary consideration in planning and carrying out the current regionally-based CCMP implementation efforts of the MBP. The MBP Management Conference, which includes wide representation from federal, state, regional, and local agencies, resource user groups, educators and scientists, and business and industry, established as the MBP's principal goal the creation and management of a healthy ecosystem of living resources, as previously noted. Specific objectives include use of the beaches; availability of uncontaminated seafood; public access to the waterfront; and protection of public health and marine habitats. In order to fulfill this goal and accompanying objectives, the CCMP identifies 15 action plans (e.g., Action Plan for Reducing and Preventing Stormwater Pollution; Action Plan for Protecting and Enhancing Shellfish Resources) which need to be implemented to improve coastal water quality.

The current efforts of the MBP in supporting regional implementation of the CCMP can be characterized as **models** in three ways:

- **Utilization of Regional Planning Agencies.** The Commonwealth's Regional Planning Agencies (RPAs) have historically provided regionally-based technical and planning assistance to communities and watershed organizations. In particular, through the RPAs, the MBP provides funds and staff support to the five Local Governance Committees (LGCs) geographically located throughout the 49 coastal communities in the Massachusetts Bays area. Members of each of the LGCs are appointed by the chief elected officials of each community. LGC staff currently assist these communities with pertinent activities such as water quality monitoring, bylaw development, grant writing, and public education - all with the ultimate goal of implementing CCMP actions. Using the geographical framework and expertise of the Commonwealth's RPAs, the LGCs have been successful in building local capacity to address coastal water quality issues through a combination of technical assistance, outreach/education, and implementation approaches.

  In a Bays-wide retreat held in January of 1996, the LGCs convened to explore and define their role in CCMP implementation, and affirmed their commitment to serve as liaison between the communities and the MBP, initiating and facilitating CCMP implementation actions at the local and regional levels.

- **Shellfish Bed Restoration Program.** Shellfish beds which are closed to harvesting, either temporarily or permanently, are an indicator of declining water quality in the Massachusetts Bays (and other marine waters). In October of 1993, an interagency team was formalized, recognizing that the actions needed to reopen these beds were not the sole responsibility

of any one agency, because no one agency has the resources to address the problems. This team includes representatives of and strong commitment by the MBP, Massachusetts Division of Marine Fisheries, Massachusetts Department of Environmental Protection, U.S.D.A. Natural Resources Conservation Service, County Conservation Districts, and municipalities with impacted beds. The MBP / RPA / LGC framework described previously is an integral part of the Shellfish Bed Restoration Program "team" approach, providing the local technical assistance and community participation key to the success of the Program.

To date, the coordinated work of the Shellfish Bed Restoration Program (SBRP) team has included securing grant funding for the identification of stormwater pollution sources and for mitigation of pollution problems at four of the 12 priority beds identified by the team. In addition, the SBRP is credited with the successful reopening of over 400 acres of beds. The team is seeking additional funds to support remediation measures which could result in the reopening of additional shellfish beds. Lastly, this effort also includes a commitment to proactive education and outreach in order to insure measures which will keep currently usable, but threatened, beds open.

- **Participation in the State Watershed Initiative.** The state Watershed Initiative builds upon the state's basin assessment schedule. For the purposes of assessing water quality and managing the state's water resources, the Massachusetts DEP conducts water quality assessment, planning, and implementation in the state's basins on a rotating five-year schedule. The Watershed Initiative expands this approach to create EOEA Basin Teams, made up of state and federal agency staff, who will perform watershed-wide water quality and habitat assessments for use by the Watershed Community Council in watershed planning. A pilot river basin (the Neponset) was selected in 1994 to explore and develop the coordinated river basin management approach. Within the Neponset Basin, local citizen/community sub-basin "stream teams" were developed to perform shoreline surveys and other local assessments and to help develop action plans for each segment of the river. The Massachusetts Bays Program assisted in the development of the estuarine sub-basin plan. The results of citizen efforts and the EOEA Basin Team for the Neponset are being combined to create a watershed management plan for the Neponset Basin.

  The watershed management process, adapted from the Neponset model, is seen as consisting of a series of four steps, each building on the other and carried out in an ongoing fashion by the Watershed Community Council, Stream Teams, EOEA Basin Teams, municipal governments, and businesses. The steps are: outreach, education, and technical assistance; resource assessment; should be targeted for dedicated funding (refer to latter water resources planning; and plan implementation (including permitting, compliance, and enforcement). Through these steps, watershed stakeholders would collaborate in the identification of environmental problems, and in the development of Subwatershed Action Plans and Watershed Action Plans. The Action Plans would describe protection and restoration measures, assign responsibilities for these measures, and set forth a schedule for implementation.

In summary, the utilization of the Regional Planning Agencies, the Shellfish Bed Restoration Program, and the state Watershed Initiative can be partially or fully characterized by a number of desirable factors for a regional approach. These were identified at both the "Models" conference and a follow-up Planning Meeting held in June, 1994. These factors include:

- application of an appropriate **geographical scale** for the actions to be taken and the problems to be solved;
- use of existing structures and organizations, to **avoid redundancy** and the creation of a new bureaucracy;
- enhanced **coordination**;
- use of a **decentralized** structure from an organizational perspective;
- coordination with **ongoing statewide efforts** to create viable regional organizations;
- **financial support** from dedicated sources of funding or project-specific grants;
- adoption of **proactive/education/technical assistance** attributes;
- a high degree of active and committed **public participation and representation**; and
- participation in and support of ongoing and future **resource-based planning and monitoring**.

A Regional Approach to CCMP Implementation: Future Efforts

This section describes the position of the Massachusetts Bays Program regarding regional implementation of the Comprehensive Conservation and Management Plan for the Bays, through consideration of current efforts and by listing recommendations for future efforts:

- The MBP believes that the MBP/RPA/LGC Technical Assistance Team model described in the previous section should be institutionalized to ensure future CCMP implementation. This cooperative and mutually beneficial relationship portions of this section) and legislative recognition.

- The interagency technical assistance team approach developed for the Shellfish Bed Restoration Program should be applied to other "teams" which will be created to implement various CCMP actions, such as those relating to stormwater management, toxics control, and protecting nutrient sensitive embayments.

- Further, the MBP believes that the MBP/RPA/LGC model and technical team approach should be extended into the Massachusetts Bays drainage area (i.e., outside the 49 coastal communities), in order to be comprehensive in its efforts to improve and manage coastal water quality on a watershed basis. This could be accomplished through coordination of the existing coastally-based Local Governance Committees with the multi-town planning committees which currently exist within the RPA geographic areas, serving the Bays' watershed communities. Since these multi-town committees are typically general purpose, they could enhance their productivity with a specific agenda of CCMP implementation activities or possibly serve as the "umbrella" for a CCMP-specific subcommittee within that multi-town planning committee.

- Finally, by organizing these committees around issues on a subwatershed/watershed basis, they could serve as a key component of the Massachusetts Watershed Initiative. This initiative involves coordinating the efforts of multiple state agencies, communities, and citizen organizations to improve water quality planning and management. The technical assistance component of the MBP/RPA/LGC model could also serve to support implementation of the state's Coastal Nonpoint Source Pollution Control Plan.

Funding and Implementation

- Dedicated funding for continuing and expanding the RPA/LGC and Watershed Initiative models into the Massachusetts Bays watershed can be obtained through sources which could include federal funds targeted to CCMP priorities in program guidances; state bond funds (e.g., the Open Space Bond); a small percentage of appropriate state agency operating budgets; the State Revolving Fund; the proposed Clean Water Act provision for watershed planning; the Intermodal Surface Transportation Efficiency Act, which links transportation improvements with water quality implementation; or through establishment of a non-profit organization.

- For proposed federal projects in the Bays' watershed which have the potential to impact the Bays, the Massachusetts Bays Program should request Federal Consistency procedures by the Massachusetts Coastal Zone Management Office, with comments to be provided by the Massachusetts Bays Program (see full discussion in Appendix F).

- The regional approach to CCMP implementation also should be utilized to assist with implementation of the Commonwealth's Coastal Nonpoint Source Pollution Control Plan (also known as the "6217" program). Under §6217 of the federal Coastal Zone Act Reauthorization Amendments, the Massachusetts CZM program is required to develop and implement a NPS Control Plan, which contains many of the same coastal water quality management and improvement measures as the CCMP (e.g., stormwater management). The guidance for development of the NPS Control Plan includes the requirement to develop ***enforceable*** measures for controlling nonpoint sources of pollution.

- The regional approach also should be used to support the development and implementation of watershed plans within the river basins which drain into the Bays, an approach strongly supported by EOEA and currently being piloted in the Neponset River Basin as part of the Massachusetts Watershed Initiative.

  For purposes of assessing water quality and managing the state's water resources, the EOEA Basin Teams undertake water quality and habitat assessment, planning, and implementation in the state's major river basins on a rotating five-year schedule. As individual river basins in the Massachusetts Bays watershed go through the EOEA basin schedule, members of the MBP/RPA/LGC Technical Assistance Team will actively participate, providing ongoing support and guidance to Bays watershed communities. Initial steps to coordinate the coastal MBP/RPA/ LGC program with the EOEA basin teams are already underway.

Management Conference Structure and Role

- During the spring of 1996, the MBP Management Committee will begin to define in detail the post-CCMP processes which will be used to: review and update CCMP policy, goals, and objectives; approve annual workplans; and guide and closely monitor implementation, including the progress of the cooperative MBP/RPA /LGC Technical Assistance Teams.

- As a result of a Bays-wide retreat held in January, 1996, the LGCs have already affirmed their commitment to continue to serve as liaison between the communities and the Massachusetts Bays Program, initiating, prioritizing, and facilitating CCMP implementation actions at the local and regional levels. Specific LGC workplans defining implementation and monitoring strategies will be developed over the spring and summer.

- The other MBP advisory committees (e.g., Technical Advisory Committee) also will meet over the spring and summer to detail their future roles in CCMP implementation and monitoring.

- Following approval of the CCMP, the Massachusetts Coastal Zone Management Office will continue to provide leadership to the Management Conference. MBP staff, funded by the

National Estuary Program, will continue to provide guidance and technical assistance as the MBP moves into the implementation phase.

Implementation Priorities

The CCMP Action Plans reflect the overall priorities of the Management Conference. In turn, regional and community implementation of the CCMP will reflect the diverse environmental needs and priorities of the extensive Massachusetts Bays coastal area. For example, while Cape Cod communities confront groundwater pollution as a priority concern, stormwater runoff is a serious concern for Salem Sound communities. The geological, socioeconomic, and environmental diversity of the Massachusetts Bays region will be reflected in the regional and community implementation priorities and strategies developed within and by the LGCs.

Commitment to Implementation

The action recommendations in the CCMP represent five years of coordinated planning within and among the participating agencies and communities. As a result, they represent the priorities and commitments of the participants.

All four of the coastal Regional Planning Agencies have signed a resolution of support for, and commitment to, implementation of the CCMP. In December of 1995, LGC community representatives and MBP/RPA/LGC technical assistance staff began a series of ongoing meetings with the chief elected officials of the Massachusetts Bays' coastal communities. As a result of these meetings, many of the coastal communities have signed a formal resolution of support for the CCMP, which includes a voluntary commitment to implement the municipal actions appropriate to each community. In addition, each of the state and federal agencies has signed a letter committing to implement the CCMP action recommendations addressed to that agency. All of these documents are included in Appendix L.

Taking Legislative Action

Implementation of a number of CCMP recommendations will either depend upon, or would be facilitated by, certain legislative actions at the state and local levels. The following chart presents a preliminary list of recommended actions in the CCMP for which legislative action is either required or would be an important source of supporting funds. The need for legislation (existing and improved) to support CCMP implementation at both the state and local levels is documented in the Bowen (1993) report. Please refer to the Base Programs Analysis (Appendix E) for further explanation of this report and its results and conclusions.

Legislative Action Support to CCMP Implementation

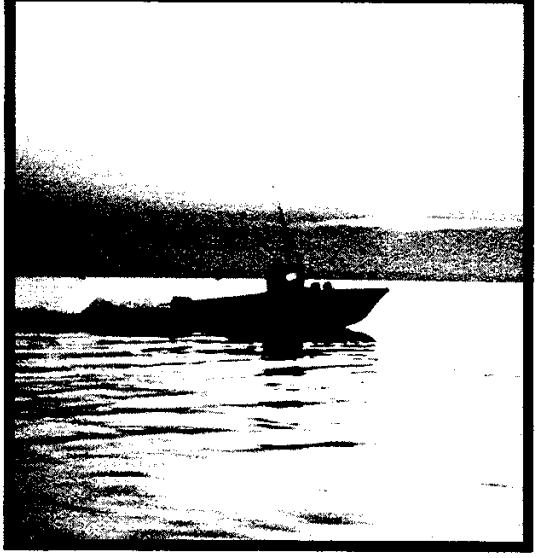
Action Plan Recommendations	Legislative Action
Protecting and Enhancing Shellfish Resources	
Local Shellfish Management Plans	State legislation to establish Shellfish Management Grants Program
Interagency Shellfish Bed Restoration Program	Future bond authorization; EOEA budget line item as part of Coastal Resource Restoration and Monitoring
Protecting and Enhancing Coastal Habitat	
Municipal Riverfront District Designations	Town Meeting/City Council adoption
DEM acquisition of prime coastal properties	Future capital bond authorization

Legislative Action Support to CCMP Implementation

Action Plan Recommendations	Legislative Action
Reducing and Preventing Stormwater Pollution	
Municipal stormwater management regulations	Planning Board adoption
Municipal mitigation of stormwater pollution	State enabling legislation for stormwater utility districts and associated fees
Reducing and Preventing Toxic Pollution	
Municipal hazardous materials, UST, floor drain regulations	Board of Health adoption
Managing On-Site Sewage Disposal Systems	
Municipal on-site sewage systems inspection and maintenance (I/M) programs	State legislation for uniform annual I/M fee for on-site systems owners
Planning for a Shifting Shoreline	
Municipal floodplain management regulations	Town Meeting/City Council adoption
Managing Local Land Use and Growth	
Local Comprehensive Plans (LCPs)	Pass state land use and growth management legislation, then pass a funding mechanism; Town Meeting/City Council adoption of plans
Implementing the CCMP	
Funding support for MBP/RPA/LGC technical assistance to municipalities	EOEA budget line item as part of Coastal Resource Restoration and Monitoring
Monitoring Water Quality	
Coastwide Marine Monitoring Plan implementation	EOEA budget line item as part of Coastal Resource Restoration and Monitoring

Financing the CCMP

chapter VII



CHAPTER VII. FINANCING THE CCMP

Introduction

Early in its 5-year comprehensive planning efforts, the Massachusetts Bays Program (MBP) recognized the need to identify sources of financial assistance and revenues to support implementation of this CCMP. In particular, the CCMP identifies priority problems facing the Massachusetts and Cape Cod Bays, setting forth a number of actions for local, state, regional, and federal agencies to implement in order to solve these problems and improve water quality in the Bays. In a time of decreasing funding for environmental projects and increasing competition for remaining funds, detailed and sound financial information is a necessity for successful implementation of CCMP actions. Accordingly, the MBP contracted with Northbridge Environmental Management Consultants to inventory and compile this information. In December 1994, Northbridge produced a report entitled, *Financing the Massachusetts Bays CCMP: Federal, State, and Local Funding Sources and Mechanisms* (*Financing Report*, for short), with appendices and supplemental information added in early 1995.

The purpose of this chapter of the CCMP is to describe and summarize the contents of the *Financing Report*. A complete copy of the *Financing Report* can be requested from your Regional Planning Agency office or the Massachusetts Bays Program office. Further assistance with grant applications or other financial questions can be obtained from your community's representative to the Massachusetts Bays Program Local Governance Committee, or the staff to that Committee housed at your Regional Planning Agency office.

Financing Report Contents

Introduction. This section of the *Financing Report* describes and distinguishes among several fiscal options to support CCMP implementation: grants, revenue sources, and financing mechanisms. The first two categories provide or otherwise generate funds which can pay for the initiatives of the CCMP without borrowing, while the third provides a framework for managing the timing or collection of cash flows, but does not in and of itself generate cash.

Grants. As previously noted, grants are an option to pay for CCMP-related initiatives without borrowing, and this section of the *Financing Report* focusses on those grants that are available from either the state or federal government. The distinction is made between grants managed by federal agencies versus those administered by state agencies, even though the state grant source is often federal money. The reader is introduced to the report's format for this section - a table for each grant which provides program objectives and description, eligibility requirements, available funds, contacts, and examples of use. Additional narrative information includes the fact that while the report catalogs numerous grant programs, the funds are often sought after by many competing interests; also included are private foundation grants. (The appendices of the *Financing Report* include an introduction to these sources.) Finally, the majority of this section is comprised of the tabular summaries of 45 federal grant programs and 20 state grant programs. Federal programs include those managed by the Department of the Interior, U.S. Army Corps of Engineers (technical assistance only), and the U.S. Environmental Protection Agency. State grants are those managed by the Executive Office of Environmental Affairs, the Executive Office of Transportation and Construction, and the Executive Office of Communities and Development, among others.

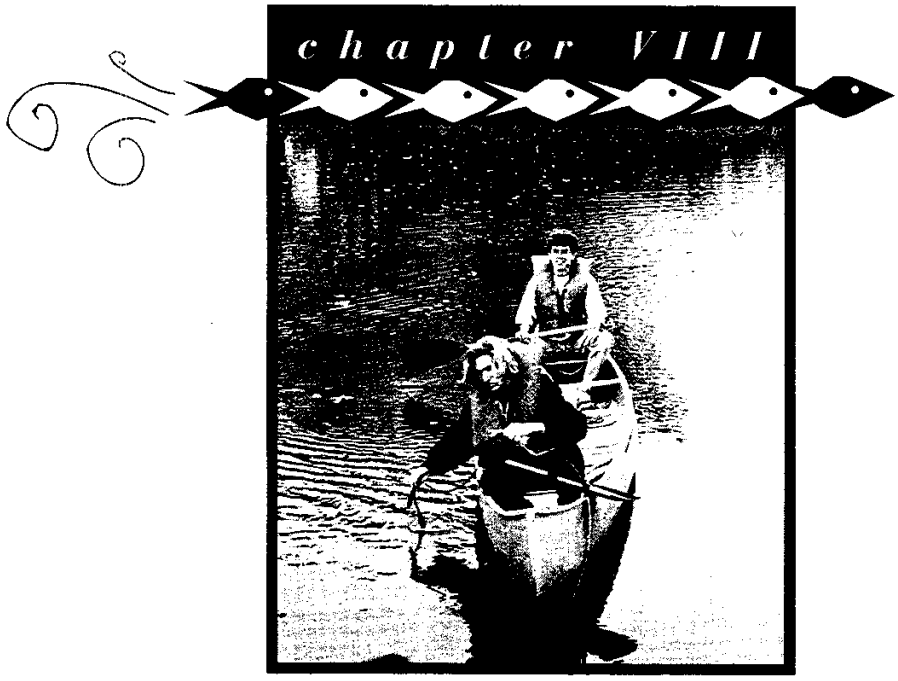
Revenues. As with grants, revenues can provide a source of funding to finance CCMP implementation without borrowing, but differ in that they are collected by a government agency and pooled for public purposes. This section of the *Financing Report* describes six types of revenues, using both a tabular format similar to the grants approach and case studies. These six revenue categories are: **taxes** (e.g., boat excise, real estate transfer); **fees** (e.g., beach, boat mooring); **betterments** (i.e., assessments for capital property improvements); **permit/licensing fees** (e.g., shellfish license, wetlands permit); **fines, penalties, mandates, laws, regulations**; and **voluntary contributions** (e.g., corporate sponsorship, tax form check-off).

Financing Mechanisms. These financing methods can be used either to collect revenues (previously described) or to manage the timing of cash flows. While these mechanisms typically do not generate their own sources of funds, a few (e.g., low interest loans) combine the collection and timing features with aspects of revenue sources because they can provide a subsidy that reduces project cost just as a grant can. For those financing mechanisms which are directly related to a specific revenue source, the framework of the mechanism is described in this section of the *Financing Report*, while the revenue is described in the previous section. The report details two types of financing mechanisms in a combination of narrative text and case studies. These financing mechanisms are: 1) **special districts**, which include enterprise

funds (accounting to closely correlate expenses/revenues of a project), utility districts, water and wastewater authorities, storm and surface water utilities, betterment districts; and 2) **bonds and loans**, which include the state revolving loan fund program.

Appendices. The *Financing Report* contains several appendices: 1) Grants from Private Foundations; 2) Municipal (CCMP) Actions and Potential Funding Sources matrix; and 3) Municipal Actions Costs: Watershed-wide Costs for Implementing Massachusetts Bays CCMP Municipal Actions.

Monitoring CCMP Implementation



CHAPTER VIII. MONITORING CCMP IMPLEMENTATION

Introduction

The Massachusetts Bays estuary (i.e., Massachusetts Bay and Cape Cod Bay), its shoreline, and its watersheds have historically been utilized for a wide range of commercial, industrial, residential, recreational, and agricultural activities and uses. In support of these activities and uses, the overall goal of the MBP is *the preservation and management of a healthy ecosystem of living resources, useable by the public.* The MBP intends to achieve this goal through implementation of the Action Plans, and numerous other commitments, in this CCMP for the Bays. In order to determine whether and to what degree this goal has been achieved, both "scientific" (e.g., water quality) and "management" monitoring will be undertaken by the MBP.

Monitoring the effectiveness of CCMP actions will be an important role of the MBP staff and Management Conference as the Program moves into the implementation phase. Success will be measured through improvements in environmental quality and by tracking implementation of management actions. This will be accomplished through measuring pre-determined environmental parameters (e.g., pathogen concentrations at shellfish beds), and formulating a system to monitor the management actions adopted by communities. Details of monitoring frequency and reporting will be developed by MBP staff with assistance from the Management Committee, Local Governance Committees, and other advisory committees in the spring and summer of 1996.

Scientific Monitoring

Since 1990, the Massachusetts Bays Program has supported scientific research and management processes designed to improve marine environmental quality. Research has focused on the physical processes that affect distribution and transport of constituents in the Massachusetts Bays region, the quantification of sources of contaminants such as polynuclear aromatic hydrocarbons (PAHs), and the effects of contaminants on living resources. In addition, through the Mini-Bays Program, the MBP has funded three projects to provide in-depth analysis of embayments and their watersheds, each with unique natural attributes and different management needs. Through these projects, the MBP has been able to develop priority issues on which to focus its management efforts and to develop measurable goals for the Massachusetts Bays as a whole.

The Massachusetts Bays Program Monitoring Plan is designed to measure the effectiveness of the management actions taken as part of the CCMP. Fifteen Action Plans describing activities affecting or contributing to the priority problems in the Bays are presented in the CCMP. Nutrients, pathogens, toxic contaminants, and habitats have been identified as topics requiring focused and immediate attention due to the extensive occurrence of contaminants in coastal Massachusetts, as well as the environmental and economic consequences of habitat degradation caused by these contaminants. Because of the need to lessen the environmental impact caused by nutrients, pathogens and toxicants, measurable goals were developed for these topics and are discussed briefly in the following section. These measurable goals form the basis for one component of the monitoring plan, which is designed to measure the success of CCMP management actions. The first-tier monitoring activities associated with the measurable goals will be implemented this year. Long-term monitoring questions have been developed based on MBP-funded research projects, the Mini-Bays projects, and the need for special studies to accompany any long-term monitoring program.

In addition, a draft coastwide monitoring plan is under development by the Massachusetts Coastal Zone Management Office, which is currently seeking funding for implementation of the plan. An integrated approach to monitoring programs for the Commonwealth's marine waters is desired, and both the MBP's and the state's monitoring plans have been developed concurrently. However, in order to assess the success of CCMP implementation within a short time period (1-2 years) and within the available funding, the MBP's current monitoring program focuses on the Program's four measurable goals (see below). The state's monitoring plan focuses on collection of baseline data in specific embayments, long-term data collection, and ecosystem modelling. Monitoring results to date from the MBP will help formulate specific monitoring questions for the state. Data from all activities will be made available to both programs, and every effort will be made to coordinate monitoring and data collection.

The MBP marine monitoring program is also coordinated, to the extent possible, with marine and watershed monitoring efforts by other programs and agencies, including the Massachusetts Department of Environmental Protection's Office of Watershed Management (DEP/OWM), the Division of Marine Fisheries (DMF), and citizen groups. These parallel environmental monitoring efforts by agencies and citizen groups will allow the MBP to track improvements in the Bays due to CCMP implementation beyond the current funding. For example, a large-scale monitoring program is currently conducted by the Massachusetts Water Resources Authority (MWRA) to determine baseline conditions before sewage effluent is discharged to the Bays. In addition,

agencies (e.g., DMF) collect data as part of their routine operations that can be used by the MBP, while citizen groups are monitoring coastal waters and performing shoreline surveys throughout Massachusetts. Implementation of CCMP actions funded by EPA's s.319 and 104(b)(3) grants, state CPR grants, and federal ISTEA funds, among others, will each include a monitoring component, which will be evaluated by MBP staff as data become available.

The MBP Monitoring Plan does not include specific information about station location, QA/QC objectives, and monitoring parameters because these details often evolve during the proposal development and selection process. Proponents of projects involving scientific data collection are required to submit a Quality Assurance and Project Plan (QAPP) for review and approval by MBP and EPA staff. All QAPPs are available through the MBP office. All draft reports are peer reviewed and comments are incorporated into the final document. These steps ensure that high quality, scientifically valid data are collected and reported. For more information, please refer to the Data Management discussion at the end of this Chapter.

To the extent possible, the MBP Management Conference and staff will track scientific monitoring efforts and management achievements. Based on the availability of funds, reports will be released on a regular basis. The schedule for review and reporting will be developed through the spring and summer of 1996.

Measurable Goals

The four topics for which measurable goals have been developed were chosen as issues requiring scientific and management attention throughout the Massachusetts Bays (and, in particular, through this CCMP's Action Plans). Measurable goals were developed for the four issue areas by the MBP Measurable Goals Committee, and these form the cornerstone of the Monitoring Plan. The Technical Advisory Committee (TAC) has approved the goals and refined them as necessary based on the development of the Monitoring Plan. The goals will continue to be refined as new information and resources become available. Monitoring and data collection by other agencies will allow the MBP to continue to track environmental improvement resulting from CCMP implementation when MBP monitoring funds are no longer available. For example, the Department of Environmental Protection will provide sampling and analysis to verify the ranking of embayments at risk of eutrophication as part of their efforts to include nutrient criteria in the State's water quality standards. The Division of Marine Fisheries routinely monitors shellfish beds for pathogen concentrations to determine whether harvesting can occur. Toxic contaminant monitoring in the Bays ecosystem is accomplished in several ways by different agencies, including the MWRA and EOEA Office of Technical Assistance. Marine habitats are studied and monitored by several agencies, such as DMF, the Wetlands Restoration and Banking Program, EPA, as well as by certain non-profit groups such as the Massachusetts Audubon Society.

The first-tier monitoring and assessment activities are already underway, under the guidance of the MBP staff scientist with assistance from the TAC. The Management Committee, with input from its advisory committees, will decide upon a process for guiding future monitoring efforts. It is anticipated that MBP staff will continue to track the progress of monitoring activities. Over the next six months the advisory committees will explore their role in tracking changes in water and habitat quality. The details of this process will be worked out with these committees during the spring and summer of 1996.

Nutrients

Excess nutrient inputs to coastal waters can cause water quality degradation through eutrophication, low dissolved oxygen levels, changes in community structure, and habitat loss.
Measurable Goal: Identify embayments at risk of eutrophication.

Pathogens

Improper treatment and disposal of human wastes (or other sources of pathogens) in the marine environment pose a risk to human health through contamination of shellfish beds and swimming beaches. The closure of shellfish beds due to pathogen contamination results in substantial economic loss to a number of coastal communities.
Measurable Goal: Re-open 12 shellfish beds closed due to pathogen contamination from nonpoint sources of pollution.

Toxic Contaminants

Toxic substances in coastal waters and sediments may be present at levels that cause contamination, adversely impact living resources, and further degrade the coastal environment. These effects may result in significant economic loss through a decline in harvestable fish stocks and tourism, and through the need for expensive alternatives for disposal of dredged material.
Measurable Goal: Quantify the reduction in loadings from targeted toxicant sources contributing to an identified habitat location and monitor improvement in selected biological indicators - e.g., reduce body burdens of toxic contaminants in biological resources below levels of demonstrable population effects.

Habitats

Loss of habitat such as coastal wetlands and anadromous fish runs reduces important nursery and breeding grounds for many species of marine animals, including commercial and recreational species. The loss of these resources creates economic hardship through lost revenue from decreased tourism and reduction or elimination of local fisheries businesses. In addition, loss of habitat can impair water quality and impinge upon other valued coastal amenities, such as bathing beaches and aquaculture facilities.

Measurable Goals:

- Restore 12 coastal wetland areas that have been adversely impacted due to restricted saltwater flow.
- Monitor and report the number of acres of coastal wetlands every five years to ensure no net loss of wetlands.
- Work with the Division of Marine Fisheries to provide an updated list of the locations and condition of anadromous fish runs. Based on the inventory, restore and monitor 5 anadromous fish runs.
- Define the critical habitat for 5 to 10 important species and monitor habitat conditions suitable for these selected species.

Mini-Bays Program

The Mini-Bays Program provided the opportunity to perform in-depth analysis of three embayments: Plum Island Sound, Weymouth Fore River Estuary, and Wellfleet Harbor. Each embayment project has a different focus because the locations, environmental conditions, and management challenges of each embayment are unique. Extensive baseline information is available for the Mini-Bays sites, and management activities have been implemented in the sub-watersheds, providing the opportunity to develop monitoring plans to evaluate management actions over the long-term.

Potential hypotheses for the long-term monitoring projects for the Mini-Bays Program follow:

Plum Island Sound: What are the relative contributions of pathogens and nutrients from the major sources to Plum Island Sound, including the Parker River, the Ipswich River, and the Ipswich WWTP? Will the repairs to the Ipswich WWTP mitigate pathogen and nutrient flux to Plum Island Sound?

Weymouth Fore River: Certain projects are being implemented in the Fore River watershed (e.g., decommissioning of the Nut Island wastewater treatment facility, the Braintree-Weymouth Interceptor project) that have environmental implications. The success of these projects will be monitored with respect to reduced loadings of toxic contaminants, nutrients, and pathogens to Fore River and Hingham Bay sediments and organisms, and for the reopening of swimming beaches and shellfish beds.

Wellfleet Harbor: The Town of Wellfleet is developing a model to predict nitrogen loading to the embayment and the possible impacts of nitrogen on shellfish resources and habitats. The groundwork for this model (i.e., embayment flushing calculations, land-based and oceanic nitrogen loading estimates, and watershed build-out analysis) has been completed. However, additional field data may be needed to verify the model predictions and determine whether additional parameters should be included, such as nutrient flux from the sediments in Duck Creek. Additionally, the distribution and biomass of macroalgae in selected intertidal areas may need to be assessed and documented.

The monitoring plans for the Mini-Bays projects should be refined as the final project synthesis reports are completed this year.

Additional Monitoring

Follow-up monitoring of MBP-funded research projects can be revisited on a time-scale appropriate for a given project. For example, depending on the results of the nutrient dynamic study in the Bays (Gardner et al., in progress), a small-scale sampling of selected sites may be warranted to determine changes in the ecosystem. Other projects that may require follow-up monitoring include the Merrimack River study (Menzie-Cura, 1991), nonpoint source runoff study (Menzie-Cura, 1995), and atmospheric loadings study (Golomb et al., 1995). The data from these studies can be used to gauge progress toward attaining the stated measurable goals, in addition to providing a broader assessment of the status and trends of the Massachusetts Bays environment.

Special Studies

The Massachusetts Bays Program recognizes that outstanding questions remain to be answered which do not fit directly into one of the monitoring categories listed above but have relevance to the overall health and understanding of the functioning of the Bays ecosystem. As monitoring projects proceed, additional questions may arise that will need to be answered to allow proper interpretation of the collected data.

A draft of the Scientific Monitoring Plan was completed and distributed for review in June 1995, and the final draft was completed in September 1995. The complete Scientific Monitoring Plan is available through the Massachusetts Bays Program office.

Management Monitoring

The purpose of this section is to describe the MBP's approach to management monitoring of the CCMP. This approach allows for the periodic, qualitative examination of certain aspects of the CCMP in order to ascertain their effectiveness. These issues do not lend themselves to the technical monitoring of environmental indicators. Accordingly, this approach for management monitoring is intended to complement the approach to scientific monitoring which is outlined in the previous sections of this chapter. The MBP LGC technical assistance staff and the LGCs will take the lead role in developing an appropriate management action tracking matrix and will formalize a schedule for tracking implementation progress over the next six months.

What Gets Monitored?

The MBP Management Conference has identified the following sections of the CCMP which contain milestones, products, or other actions which will be subject to qualitative review:

Chapter III, "Overview of Coastal Subregions"

In Chapter III, each of the 5 subregions within the MBP area are described according to a variety of characteristics, including their physical attributes, land use, coastal resources, and resource management issues. In particular, these summaries include the results of the "Community Resource Management Survey," which tracks the status of individual communities' efforts related to planning, bylaw development, and resource use and protection. These are major activities which directly support implementation of CCMP Action Plans such as Protecting and Enhancing Coastal Habitat, Reducing and Preventing Stormwater Pollution, and Managing Local Land Use and Growth. Accordingly, the Community Resource Management Survey will be reviewed and updated as communities take action to protect and enhance water quality and the living marine resources of the Massachusetts Bays.

Chapter IV, "Projects of Regional Scope and Impact"

The so-called "megaprojects" which are described in Chapter IV are those projects which may have a greater-than-local effect on the ecosystem of the Massachusetts Bays. Although the MBP is not the proponent for any of these projects, it did attempt to develop and build consensus on those actions which are needed to ensure that each of the projects proceeds in a manner which maximizes benefits for the people of the region while posing the least risk to the Bays. In particular, each of the seven megaproject discussions includes action recommendations for the appropriate federal, state, regional, and local proponents so that the previously identified risk/benefit goal is achieved. For example, the Boston Harbor Project incudes recommendations for several federal agencies (among others), while the South Essex Sewerage District discussion establishes recommendations for the Massachusetts Department of Environmental Protection. The recommendations in all of the megaproject discussions will be evaluated to ensure that the appropriate actions have been taken, or to revise and otherwise update the goal of a given recommendation. The process and timeframe for re-evaluating regional projects and tracking the associated action plans will be developed by the Management Committee over the spring and summer of 1996.

Chapter V, "Action Plans"

The Action Plans can be considered the "heart" of the CCMP, and establish a broad blueprint of action by a number of agencies and organizations to meet the MBP's goals. The CCMP contains 15 major Action Plans, each of which contains at least one, if not a number of, individual actions to meet the stated criteria of the Action Plan. The successful implementation of a number of these actions can be evaluated through monitoring of specific water quality indices over time; for example, the reduction of toxic and oil pollution in the Massachusetts Bays resulting from implementation of the corresponding CCMP Action Plans. However, other Action Plans/individual actions do not lend themselves to this type of scientific approach. In particular, actions such as Planning for a Shifting Shoreline and Managing Local Land Use and Growth will be directly evaluated to assess whether implementation by the responsible agency(ies) has been successful. The LGCs and LGC staff will monitor the progress made in implementing action plans directed toward communities. MBP staff will be responsible for meeting regularly with environmental agencies to monitor the implementation of action plans associated with each agency.

Chapter VI, "Implementing the CCMP"

In Chapter VI, the MBP's "CCMP Implementation Strategy" is summarized. This chapter establishes a framework for the various agencies and organizations in undertaking their respective actions to implement the CCMP. In particular, this Strategy continues the current efforts by MBP's regional technical staff, who are housed within the four Regional Planning Agencies in the MBP area and who assist coastal communities with implementation of CCMP recommendations, as well as by facilitating and directing the work of other agencies responsible for implementation. Accordingly, the activities of these MBP/RPA/LGC "teams" will be tracked in order to evaluate their effectiveness in facilitating implementation of the CCMP's recommendations. From the perspective of agency participation, the model of the Shellfish Bed Restoration Project (SBRP) has been successful and will be

used as additional teams are developed. The SBRP has a Management Working Group, comprised of interested agency members, which meets regularly and tracks progress toward attainment of the project's goals.

Who Will Do This Monitoring, And How Will It Be Undertaken?

As previously noted, the Management Conference is the governing body for the MBP, and as such, it has overseen all aspects of the CCMP for the Massachusetts Bays. In particular, this includes establishing a network of committees who represent federal, state, and local agencies; scientists; business interests; the general public; educators; and user groups. These committees have supported development of the recommendations in the CCMP through scientific study and analysis, policy development, and education and outreach. Accordingly and following approval of the CCMP, the Management Conference will assess and establish its roles relative to the review and updating of CCMP policy, goals, and objectives, and in guiding MBP/RPA/LGC technical assistance team activities (all during the spring and summer of 1996). Additional efforts will include the tracking, review, and evaluation of activities identified in the previous section. The specific assessments to be undertaken by both the post-CCMP Management Conference, and by the MBP staff who report to the Conference, are summarized as follows:

Community Resource Survey: Poll communities in the Survey to identify recently undertaken, appropriate actions which may constitute or otherwise support CCMP implementation.

Megaprojects: Determine the extent to which the responsible party(ies) have implemented the recommended actions; also, assess whether the recommendations themselves continue to be appropriate.

Action Plans: Interview the various parties responsible for each action to determine the status of their efforts regarding implementation; this applies to Action Plans which do not lend themselves to quantitative assessment.

Implementation Strategy: Since this is the framework within which the above actions will be taken, the success of the Implementation Strategy will reflect the successful implementation of these actions.

When Will This Monitoring Be Undertaken?

As previously noted, the Management Conference, as the governing body for the MBP, will continue to exist upon completion of this CCMP and as such, will ultimately be responsible for evaluating the success of CCMP implementation. Further, with continuation of federal funding (albeit at reduced levels), and with potential funding through the Commonwealth of Massachusetts, staff support for the Management Conference also will continue. This aspect is particularly significant regarding the regional technical staff who assist the coastal communities in the MBP area, since a number of the CCMP actions identify local officials as the responsible implementing agents. These same staff also will work with state and federal agencies to facilitate additional implementation efforts.

In summary, implementation of the actions and recommendations found in this CCMP for the Massachusetts Bays can be measured using methods for both scientific and management monitoring. However, it should be noted that the Management Conference will not limit its oversight and evaluation of CCMP implementation to those portions of the document which are directly measurable through either quantitative or qualitative methods. The CCMP is a "living" document, and as such, the Management Conference intends to consider all aspects of it in its implementation of the CCMP and in the ultimate achievement of its goals for the Massachusetts Bays.

Data Management

All MBP data sets will be made available in widely used, standard desktop formats (comma-delimited ASCII format, Excel, and Quattro Pro), and will be accompanied by digital documentation that will include a description of each data file, Quality Assurance Plan, and the Final Research Report. These data file formats can be easily incorporated into any future data bases, and the documentation will make the files discernible to future users. The data and documentation will be available for viewing and downloading via CD-ROM and/or the Internet.

MBP data include:

1. MBP-funded research, demonstration projects, and Mini-Bays data sets;
2. Digital files of Massachusetts Bays community map overlays; and
3. New GIS data on Stellwagen Bank, Massachusetts Bays bathymetry, etc.

The MBP Data Management agenda has changed over the years from the initial vision of putting the data into a specialized, centralized structure like that of ORACLE or ODES, to an open data structure with detailed documentation and easy public access that will make the data easily available for years to come with little or no maintenance. Open formats will allow access for all potential users (e.g., Regional

Planning Agencies, community officials, the MWRA, other state agencies, and private organizations), regardless of software, analytical needs, or expertise. Any future monitoring programs in Massachusetts Bays could have very specific data standards and still easily incorporate MBP data into their structure from the open formats in the MBP data base.

For more information on the MBP data sets, contact the Massachusetts Bays Program office.

Management Characterization
(Base Programs Analysis)

chapter IX

CHAPTER IX. MANAGEMENT CHARACTERIZATION (BASE PROGRAMS ANALYSIS)

The Massachusetts Bays estuary (i.e., Massachusetts Bay and Cape Cod Bay), its shoreline, and its watersheds have historically been used for a wide range of residential, commercial, and recreational activities. Not surprisingly, these potentially conflicting uses are subject to a vast number of decisions and actions by a complex institutional network. The Massachusetts Bays Program (MBP) has analyzed this network ("Management Characterization" or "Base Programs Analysis") relative to the Program's various goals, of which the overarching goal is the *preservation and management of a healthy ecosystem of living resources, useable by the public.* Specific supporting goals include: reduction of nutrients from point/ nonpoint sources, improved habitat quality, reduction of toxic contaminants, and reduction of pathogen pollution of shellfish beds. These goals will be met through implementation of the CCMP.

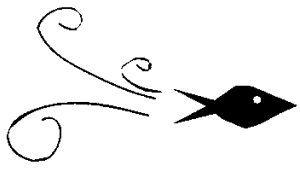
In accordance with EPA guidance, the MBP has undertaken various aspects of this Analysis since the Program's inception, such as:

- The CCMP's "State of the Bays" assessment (see Chapter II);
- Action Plans developed to correct priority problems and meet Program goals (see Chapter V);
- Chapter VI of the CCMP, "Implementing the CCMP Throughout the Bays Watershed"; and
- *The Massachusetts Bays Management Systems: A Valuation of Bays Resources and Uses and an Analysis of its Regulatory and Management Structure* (Bowen and Terkla, June 1993).

The development and ultimate implementation of the CCMP has been, and will continue to be, guided by the MBP's governing body, the Management Conference. The Management Conference's membership consists largely of the institutional network referenced above (e.g., representatives from appropriate federal, state, and local government agencies; regional planning agencies; various user groups; public and private education institutions; and the general public). The Analysis reflects the consensus approach of the Management Conference in that the institutional network which will implement the CCMP consists of both Conference member and non-member agencies which support the CCMP Action Plans needed to achieve the MBP's goals; in addition, the CCMP identifies agencies whose programs may need additional resources or efforts.

For the complete ***Management Characterization/Base Programs Analysis,*** please refer to Appendix E (available under separate cover).

Federal Consistency Analysis



CHAPTER X. FEDERAL CONSISTENCY ANALYSIS

The Massachusetts Bays estuary (i.e., Massachusetts Bay and Cape Cod Bay), its shoreline, and its watersheds have historically been used for a wide range of residential, commercial, industrial, agricultural, and recreational activities and uses. Many of these activities and uses are supported or otherwise affected by a broad array of federal actions and decisions. In turn, these federally-sponsored activities have as wide a range of objectives as they do variety, and as such, some can be inconsistent with the goals of the Massachusetts Bays Program (MBP). The overall goal of the MBP is the ***preservation and management of a healthy ecosystem of living resources, useable by the public***, to be achieved through implementation of the action plans in the CCMP.

In accordance with EPA guidance, the MBP has undertaken a "Federal Consistency Analysis" to address the potential inconsistencies between the CCMP and federal actions. In particular, this Analysis accomplishes the following:

- An inventory of those federal programs, actions, and decisions which could possibly affect the CCMP. This includes programs eligible for coverage under Federal Executive Order 12372 (Intergovernmental Review of Federal Programs), the Catalog of Federal Domestic Assistance, and other relevant sources.

- Evaluation of the inventory relative to the CCMP. This indicates that the CCMP, as currently written, is consistent with inventoried federal programs, actions, and decisions.

- Identification of an approach to address any inconsistencies between future implementation of the CCMP and federal programs, actions, and decisions. This approach uses the existing consistency process employed by the Massachusetts Office of Coastal Zone Management (MCZM), which insures that applications for certain federal actions or approvals in the Commonwealth's designated Coastal Zone, or which affect the Coastal Zone, are consistent with MCZM's enforceable program policies. In order to facilitate consistency with CCMP implementation, the MBP will have the opportunity to comment on proposed federal actions subject to MCZM review, as well as to recommend that a proposed federal action be reviewed by MCZM.

For the complete ***Federal Consistency Analysis,*** please refer to Appendix F (available under separate cover).

Public Participation/ Public Responsiveness Summary

CHAPTER XI. PUBLIC PARTICIPATION/PUBLIC RESPONSIVENESS SUMMARY

Introduction

The principal goal of the Massachusetts Bays Program (MBP) is the *preservation and management of a healthy ecosystem of living resources, useable by the public.* The word "public" is operative in that public involvement has been, and will continue to be, a major component of the development and implementation of the CCMP. The CCMP provides the framework for meeting the MBP goal. Within the MBP Management Conference (the overall governing body), public involvement occurs through the Local Governance Committees (LGCs), the Technical Advisory Committee (TAC), and the Public Participation Program. All are members of and report to the Management Committee, the MBP's operating committee.

Local Governance Committees

The LGCs are 5 subregional committees (8 Towns and the Bay, Salem Sound 2000, Metro Boston, South Shore, and Cape Cod Coastal Resources Committee). They are made up of local officials and appointees from each of the 49 coastal communities in the MBP region. These committees serve as local forums to address water quality issues in support of the MBP goal, through the provision of technical assistance and demonstration grant monies. Typically, representatives of the LGCs provide input into and guidance on MBP decisions at Management Committee meetings. In one way or another, these decisions are related to the CCMP.

Technical Advisory Committee

The TAC, a committee comprised of marine scientists from academia, government, and non-profit organizations, serves two important functions for the MBP. First, it has overseen the approximately $1.6 million of research funded by the MBP, and has offered recommendations to the Management Committee regarding this research and its relationship to the CCMP. This research has provided valuable data regarding the status of living resources within the Bays, supporting the action recommendations in the CCMP. Second, the TAC advises the Management Committee on issues of technical significance, such as federal or state regulations which might affect the monitoring of marine water quality.

Public Participation Program

As developed by the Management Conference, the MBP's Public Participation Program is highly conducive to the involvement of and contribution by a broad spectrum of the public who use, benefit from, are advocates for, or are teachers about the Massachusetts and Cape Cod Bays. In particular, the Program's efforts and activities, with support from MBP staff, have directly contributed to the development of key elements of the CCMP (e.g., Action Plan for Reducing and Preventing Oil Pollution; Action Plan for Enhancing Public Education and Participation). Related efforts include outreach materials such as fact sheets and public service announcements. Following are descriptions of various committees and activities which comprise the MBP's Public Participation Program:

Business and Resource Users Group

As its name implies, members of the Business and Resource Users Group (BUG) include representatives of both the Bays' *business* interests (e.g., Massachusetts Bays Yacht Club, Massachusetts Lobstermen's Association), and *user* interests, such as the New England Aquarium Divers' Club. The BUG's purposes related to these groups include provision of a forum for the exchange of ideas and resources, and support for the development and use of environmentally protective technologies. With respect to the CCMP, an example of BUG's involvement is the recommendation for a state/municipal/private partnership regarding the minimization and recycling of hazardous materials, as contained within the Action Plan for Reducing and Preventing Toxic Pollution. Further, BUG has supported public access issues as a means to enhance user experiences (Action Plan for Enhancing Public Access and the Working Waterfront).

Education Alliance

As indicated by its name, the Massachusetts Bays Education Alliance (MBEA) is a group of teachers and educators who represent schools and organizations from across the Massachusetts Bays region (49 coastal communities plus 112 inland communities). The membership includes a significant number of both public and private grade school and high school teachers, as well as instructors and trainers from institutions and organizations which are involved in environmental education (e.g., Massachusetts Cooperative Extension Service). The goal of the MBEA is to educate as many residents and users of the Bays as possible about the importance of the Bays and their own everyday responsibilities in protecting the Bays. In addition to its direct involvement in developing and implementing the Action Plan for Enhancing Public Education and Participation within the CCMP, the MBEA been responsible for training teachers in the Bays-related curriculum: "Watershed Education Training."

Coastal Advocacy Network

The membership and purpose of the Coastal Advocacy Network (CAN) are somewhat self-explanatory; CAN members are those non-governmental organizations (NGOs) whose efforts in some way support the protection of Massachusetts and Cape Cod Bays. Examples of these advocates include the Conservation Law Foundation, the Cetacean Research Unit, the Association for the Preservation of Cape Cod, and Save the Harbor/Save the Bay. While CAN advises and updates the MBP regarding the status of advocacy efforts, such as changes to the state sanitary code/on-site disposal systems, it also has been entrusted with a somewhat separate role from the MBP such that its views do not always represent the MBP - for example, when it comments on controversial legislation. As a network of advocates for the protection of Massachusetts' coastal resources, CAN has reviewed and commented on most aspects of the CCMP, focussing on the Action Plans.

Related Activities

Examples of MBP activities which directly support the overall efforts of the Public Participation Program include:

- **Bays Action Grants**. The Bays Action Grants are small grants awarded to individuals, communities, organizations, and small businesses for educational programs regarding the public's role in preventing and reducing water pollution to the Massachusetts Bays.
- **Public Service Announcements**. The two recently developed "PSAs" outline the responsibilities of all members of the public in preventing water pollution, using a backdrop of easily recognized scenes of the Bays, both clean and polluted.
- **Local Governance Committee (LGC) Action Grants**. These grants are awarded to the five Local Governance Committees to fund local actions which support CCMP implementation. Examples include establishment of waste oil repositories and monitoring of sensitive embayments.

Summary

In summary, the MBP Public Participation Program strives to insure that all who are reached through the program learn the basic premises of the MBP; the importance of protecting the Bays; and what they can do, both individually and collectively, to improve the quality of the Bays' resources; all using the development and implementation of the CCMP as a framework. The Public Participation Program is broad and inclusive, reaching schoolchildren, teenagers, and adults who are residents, users, protectors, and managers of the Bays and their resources.

Public Responsiveness

The MBP's principal goal in establishing an approach to Public Responsiveness is to build on the Program's extensive advisory/public participation efforts, as documented in the previous sections of this chapter. Accordingly, and for purposes of this section, public responsiveness will document the opportunities for review of the CCMP by the public, as well as provide responses to submitted comments.

The MBP has solicited comments from the over 300 members of the Management Conference on the three previous drafts of the CCMP, the most recent being the Draft Final CCMP published in December of 1995. In turn, the input of these individuals has reflected an even broader scope of review. For example, as members of the Management Conference, the five LGCs have sought input on the CCMP from many of their fellow local officials, including: Selectmen/City Council members, Conservation Commissioners, Planning Board members, and Board of Health officials. In addition, all LGC meetings, as well as all other MBP meetings, are open to the public and provide an opportunity for regular public involvement.

Public review opportunities for this Final Draft of the CCMP included both the Management Conference, by repeating the process described in the previous paragraph, and a formal public review process. With respect to the latter and as advertised twice in the "Monitor" in mid- and late-December, 1995, a formal Public Meeting to review and comment on the CCMP was held on January 23, 1996, in the auditorium of the Commonwealth's Hurley Building, downtown Boston. The "Monitor" is published by the Massachusetts Environmental Policy Act (MEPA) office to announce the status of MEPA projects, as well as to advertise any pertinent environmental decisions and events. It is distributed free of charge to over 2,500 members of the public, government officials, non-profit organizations, and consultants who have an interest in environmental issues in Massachusetts. This Final Draft of the CCMP, and all its supporting appendices and documentation, was made available for public inspection at the MBP office in Boston and was mailed out on request. The MBP established a comment period for the CCMP, which ran through January 31, 1996.

Many constructive comments were received from a wide variety of governmental and public representatives. A summary of the comments received within the public comment period, with proposed responses, was reviewed and approved by the Management Committee on February 7, 1996. A few comments were received shortly after the January 31, 1996 closing date; the responses to these comments did not substantially change the content of the CCMP. Accordingly, all comments on the CCMP and the MBP's written responses are included in Appendix G.